

**Notice of Allowability**

Application No.

10/628,195

Examiner

Albert W. Paladini

Applicant(s)

LOWTHER ET AL.

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on 7/28/03.
2. ☒ The allowed claim(s) is/are 1-47.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

***Reasons for Allowance***

1. The following is an examiner's statement of reasons for allowance: None of the references cited or the art searched disclose or teach alone or in combination the simulation of interconnect lines where the interconnect lines are partitioned into groups which do not interact with each other as recited in claims 1 and 41, the method of modeling an integrated circuit where the modeling occurs without a linegroup affecting the modeling of other line groups as recited in claims 12 and 46, the computer-readable medium where the interconnect lines are partitioned into groups which do not interact with each other as recited in claim 28, and the method of simulating interconnect lines where the lines are partitioned into groups where each group has a select interaction with another group as recited in claim 37 and 47.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Relevant Prior Art***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Auger (4703482) discloses an apparatus for detecting faults in microprocessors, which uses an interface device to simulate the interconnections between the main system and a variety of microprocessors.

Glover (5081602) discloses a computer simulation system for electrical connectors using a first set of stored connector defining parameters for geometry and a second set of stored parameters for signals.

LeBlanc (5949991) discloses a method of analyzing signal propagation delays through interconnect wires, where a plurality of interconnect lines is generated, and the associated data is mapped into a distributed circuit model including appropriate impedance elements.

Stellenberg (6167364) discloses a method and apparatus for generating interconnect patterns in a programmable logic device using a model of interconnect lines represented by a ladder network or resistors with arbitrary load models.

Sercu (6353801) discloses a method of simulating a planar structure with top and bottom conductors, where dividing it into a number of rectangular or triangular cells simulates the structure.

Teig (6915500) discloses a method for implementing wiring layers on an integrated circuit, which includes a step of dividing interconnect lines into independent groups, where diagonal lines are considered independent from horizontal lines since they reside on a different metal layer.

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3. Any inquiry concerning this communication or earlier communication from the examiner should be direct to Albert W. Paladini whose telephone number is (571) 272-3748. The examiner can normally be reached from 7:00 to 3:00 PM on Monday, Tuesday, Thursday, and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Leo P. Picard, can be reached on (571) 272-3749. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

May 9, 2006



Albert W. Paladini

Primary Examiner

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